Mortar Ballistic Computer

Description

The Mortar Ballistic Computer (MBC) will automate technical mortar fire direction and replace the M16 and M19 plotting boards as the primary means of computing 60mm and 81mm mortar firing data. The end-state MBC system will consist of a ruggedized, handheld device utilizing the latest Windows-based operating system to host the Mortar Ballistic Kernel Software. This standalone system will be fielded to 60mm mortar sections at the infantry company level, and 81mm mortars at the infantry battalion level.

Operational Impact

The MBC will provide faster, safer, more accurate computation of the firing data under all combat and training conditions. It will provide the primary means by which Fire Direction Center (FDC) personnel convert request for fire to appropriate firing data and fire commands, by automating the computation and display of accurate firing solutions. The MBC will also provide the capability of an automated firing solution that accounts for non-standard conditions (propellant temperature and meteorological data).Without this capability, mortars must fire time-consuming registration missions that needlessly expend ammunition against inactive targets, while divulging their own location. Common hardware will be used for the MBC. The baseline hardware will be the same for the Pocket Forward Entry Device (PFED) used by Army/Air Force Forward Air Controllers (FAC), Back-Up Computer System (BUCS) used by Marine Corps artillery units, and Dismounted Digital Automated Computer Terminal (D-DACT) used by the Marine Corps infantry. This provides common configuration across the services.

Program Status

MBC is an Acquisition Category III, Army-led, joint-interest program. The MBC project office is coordinating with the Army's Program Manager (PM) Mortars to leverage their Lightweight Handheld Mortar Ballistic Computer (LHMBC) effort. A research, development, test, and evaluation effort began in first quarter FY 03 to develop the MBC system. Software has passed Full Qualification Tests (FQT), and the Operational Test was completed during November 2004. Marine Corps hardware procurement decision is currently scheduled during second quarter FY 05.

Procurement Profile:	FY 05	FY 06
Quantity:	623	0

Developer/Manufacturer:

Software and Integration:

Program Manager, Mortars, Picatinny Arsenal, Aberdeen Proving Grounds, MD

Hardware:

Obtained from U.S. Government General Services Administration